

ABSTRACT

A semiconductor apparatus includes a semiconductor device having circuit electrodes aligned centrally of the semiconductor apparatus. A first electrically insulating layer is formed on said semiconductor device with said circuit electrodes being exposed from said first insulating layer. A second electrically insulating layer is formed on said first insulating layer, and external connection terminals are formed on said second insulating layer. A wiring is formed on said second insulating layer to electrically connect said external connect terminals to said circuit electrodes of said semiconductor device, and a third electrically insulating layer is formed on said second insulating layer and on said wiring. Particles are provided in the second insulating layer to control a shape of said second insulating layer.